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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,602	12/30/1999	BRYAN J. MOLES	SAMS01-00097	6560

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EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/475,602	Applicant(s) MOLES ET AL.	
	Examiner Linh LD Son	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 1999.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responding to the amendment dated 09/01/04.
2. Claims 5-7, and 13-15 are amended.
3. Claims 1-20 are pending.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 7-13, 15-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by **Chuah et al** hereinafter ("Chuah")(US 6665718131).

6. As per Claims 1, 9, and 17, Chuah discloses "Mobility Management System" invention, which includes a wireless, network (Col 1 line 12), comprising a plurality of base stations (Col 5 lines 49-56), each of said base stations communicate with a plurality of mobile stations, a security device (Registration agent, Col 7 lines 17, Col 8 lines 27-41, and Col 8 lines 44-59) capable of preventing an unauthorized workstation from accessing an Internet protocol (IP) Data network through a network, said security device comprising: a first controller (Access Hub, Col 6 line 66 to Col 7 line 11, and Col 6 lines 15-16) capable of receiving from said un-provisioned mobile station an IP data packet payload (Col 7 lines 12-25) and *replacing said IP packet header with a replacement IP packet header comprising an IP address of a selected one of at least one provisioning server of said wireless network* (Col 7 lines 31-41, and Col 8 lines 8-12).

7. As per Claims 2 and 11, Chuah discloses the security device set forth in claims 1 and 9 *where* said first controller is disposed in at least one of said plurality of base stations (Col 6 lines 66).

8. As per Claims 3 and 10, Chuah discloses the security *device* set forth in *Claim 1* and 9 *wherein said first controller is* disposed in a *mobile* switching center of said *wireless* network (Col 7 line 30).

9. As per claims 4, and 12, Chuah teaches the security device set forth in claim 1 comprising a second controller (Registration Agent, Col 7 lines 12-15) capable of determining that said un-provisioned mobile station is un-provisioned (Col 8 line 66 to Col 9 line 20).

10. As per claims 5, 13, and 18, Chuah discloses the security device set forth in Claim 1, wherein said second controller determines that said un-provisioned mobile station is un-provisioned if said un-provisioned mobile station is unable to authenticate to said wireless network (Col 16 line 54 to Col 17 line 20).

11. As per claims 7, 15, and 20, Chuah discloses the security device set forth in claims 1,9, and 17 wherein the second controller determines that said unprovisioned mobile station is un-provisioned according to data receive from a home location register associated with said wireless network (Col 15 lines 5-6, and Col 16 lines 54-63).

12. As per claims 8 and 16, Chuah discloses the security device set forth in Claim 1 wherein said first controller comprises a data processor capable of executing an encryption program stored in a memory associated with said data processor (Col 10 lines 55-67, and Col 14 lines 3-16).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al and in view of Henry (US 5,603,084).

15. As per Claims 6, 14, and 19, Chuah teaches *the security device set forth in Claim 1, 9 and 17 and also the second controller and further suggests of different method of internet remote access, such as GSMICDMAITDMA*

network and more listed in Col 4 line 64 to Col 5 line 9. However, Chuah does not teach the step of determining that an un-provisioned mobile station that is unauthorized according to a predetermined telephone number. Nevertheless, Henry discloses a cellular system connected to PSTN through a mobile switching center (MSC) (Col 5 lines 3-21). The cellular system along with the MSC provides determination of a mobile access rights by using the Mobile Identification Number (MIN) equivalent to a 10 digits telephone number (Col 5 lines 33-49). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Henry into the second controller on the security device of Chuah to determine the mobile station is authorized/unauthorized based on the telephone number. The incorporation could add another layer of authentication to the wireless network to minimize unauthorized mobile device accessing the network (Col 4 lines 29-59 and Col 5 lines 45-64).

Response to Arguments

16. Applicant's arguments filed 09/01/04 have been fully considered but they are not persuasive.

17. As per remark on page 9 3rd paragraph, Examiner did inadvertently insert the limitation from another patent application. However, the cited

reference does disclose the teaching of the “*replacing said IP packet header with a replacement IP packet header comprising an IP address of a selected one of at least one provisioning server of said wireless network*” limitation. As cited in Detail Action dated 06/04/2004, (Col 7 lines 31-41 and Col 8 lines 1-12), Chuah discloses a method of provisioning a non-provisioned mobile device by setting a tunnel to redirecting the registration request frame of the Mobile device connected at the mobile station to the mobile switching center where the provisioning server is located (emphasis added). Chuah further elaborates the authentication method in Col 17 lines 35-55, and Col 25 line 10 to Col 26 line 10, which discloses a complete registration request process including the utilization of the “Home Registration Server IP Address” in the access-request packet to forward the registration request to for authentication. The detail technical registration process involving different layers of network is also discloses in Col 11 line 1 to Col 14 line 67.

18. As per remark on page 9 last paragraph to page 10 first paragraph, Chuah does fully discloses a method of preventing an un-provisioned mobile station from accessing the IP network by utilizing the proxy agent in Col 7 line 17 and further elaborated in Col 17 lines 40-55.

19. As per remark on page 10, second paragraph, Applicant has mistakenly interpreted the cited column 8 line 66 to column 9 line 1. The correct

interpretation should be “the registration server in the foreign WSP determines the identity of the mobile station system’s home network, so that the registration server can acquire the correct authentication data for the mobile station attaching to the foreign network”. The mobile station here has to be an un-provisional device, since the foreign registration server has no authenticating data of the mobile station.

20. As per remark on page 10 last paragraph, it is clearly that Chuah teaches the registration, authentication, and even preventing of the un-provisioned mobile stations accessing the network. Chuah teaches clearly in Col 17 lines 8-11 and lines 50-55.


Conclusion

21. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-272-3856.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2100.

Art Unit: 2135

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIR.I system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pzd-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KIM VU
SUPERVISORY PATENT EXAMINER
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Linh LD Son

Patent Examiner